

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of manufacturing syntactic foam including the steps of:

providing a predetermined ratio of constituent materials including a liquid phase binder and microspheres that are naturally buoyant in that binder;

blending the constituent materials into a mixture and placing the mixture into a mold ~~mould~~;

allowing the microspheres to float to the top of the mixture;

draining excess liquid phase binder from the mold ~~mould~~; and

allowing the remaining liquid phase binder to set or cure between the microspheres.

2. (Original) A method as claimed in claim 1 wherein the microspheres are allowed to float to the top of the mixture until they become close packed.

3. (Original) A method as claimed in claim 2 or wherein the microspheres become close packed in a density approaching the natural microsphere bulk density.

4. (Currently Amended) A method as claimed in claim 2 wherein the step of allowing the microspheres to float to the top of the mixture until they become close packed is facilitated by selecting ~~[[a]]~~ the liquid phase binder ~~composition that has~~ to have sufficiently low viscous drag characteristics, and sufficiently long curing time, as to allow the microspheres to become close packed before the binder cures.

5. (Currently Amended) A method as claimed in claim 4 wherein the liquid phase binder ~~composition~~ is selected by adding a predetermined amount of diluent.

6. (Original) A method as claimed in claim 5 wherein the liquid phase binder includes an epoxy resin with hardener, and the diluent comprises acetone.

7. (Currently Amended) A method as claimed in claim 1 wherein the excess liquid phase binder is drained from the bottom of the ~~mould~~ mold.

8. (Currently Amended) A method as claimed in claim 2 wherein the liquid phase binder is drained from the bottom of the ~~mould~~ mold until the close packed microspheres reach the bottom of the mold ~~mould~~.

9. (Currently Amended) A syntactic foam article comprising close packed microspheres bound together by a cured composition, wherein the composition was, originally the liquid phase binder and wherein the foam was manufactured by a method according to claim 1.